



# Major Science Initiatives

FROM PILOT TO FLAGSHIP FUND

Lessons-learned from the final performance  
reports analysis (2012-2017)

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The background is a collage. On the left, there are several compasses, some in focus and some blurred, with a blue and purple color scheme. On the right, there is a close-up of a compass with a blue face and a silver ring, resting on a surface that looks like a financial data table with various numbers and percentages. Below the text, there is a close-up of a crystal ball reflecting a landscape, set against a dark, textured background.

**Why is this  
retrospective  
important to all  
of us?**

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Exclusive,  
just for you!

Publication January 2019

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# Goals of the analysis

- Gather evidence in support of the fund's objectives
- Identify areas where CFI funding has had the most impact
- Identify lessons learned
- Insights for evolving the fund

## FUND OBJECTIVES

1. Optimize operations for full exploitation
2. Secure and strengthen to deliver world-class research and benefits
3. Promotion of best practices in governance and management





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# A DIVERSE COHORT

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2012



compute | calcul  
canada | canada



2014



érudit



Canadian Cancer  
Trials Group



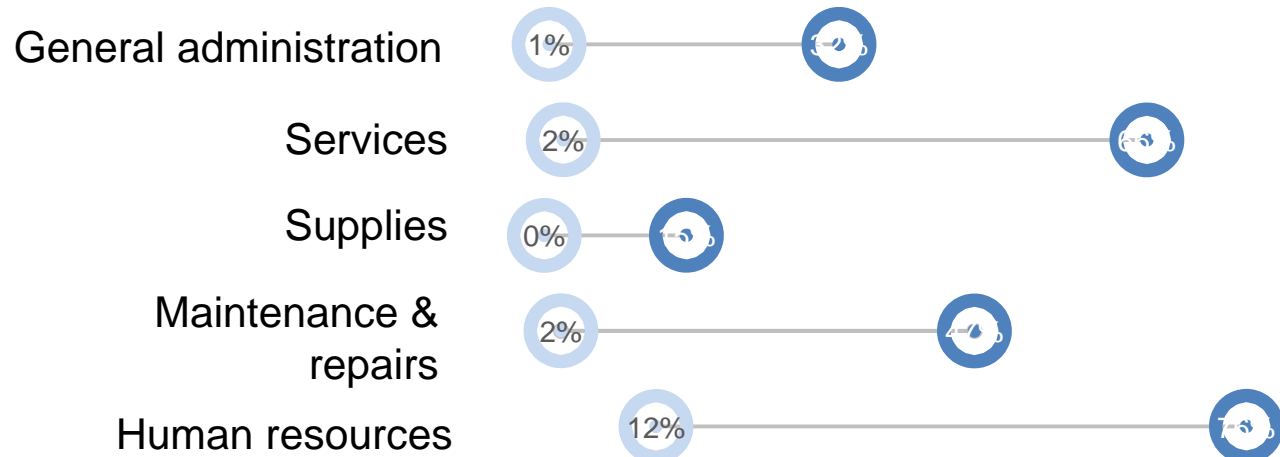
Groupe canadien  
des essais sur le cancer

SuperDARN Canada  
In the land of living skies.

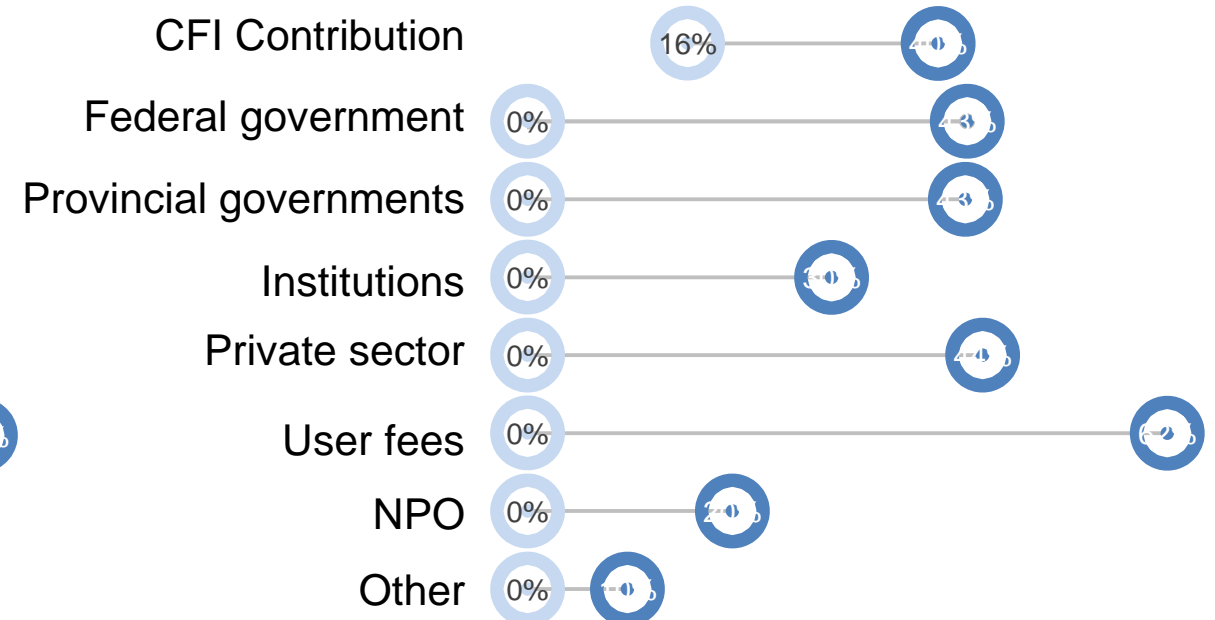
## A DIVERSE COHORT

# Each facility has a distinctive funding profile and O&M needs

### Range of expenditures

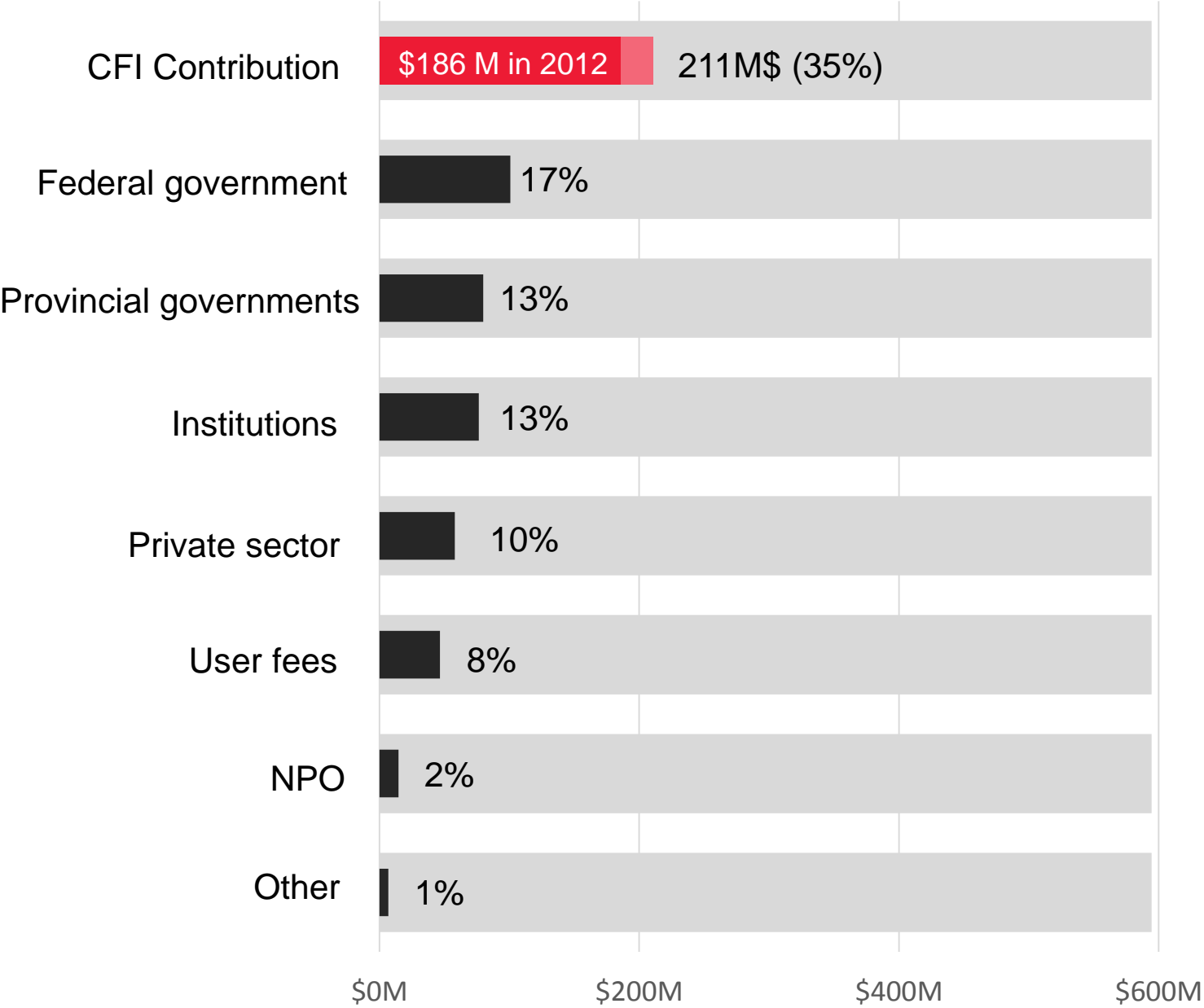


### Range of contributions



# Complex funding environment

CFI was the single largest contributor to the facilities' O&M costs





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# **Evidence supporting each MSI objective**

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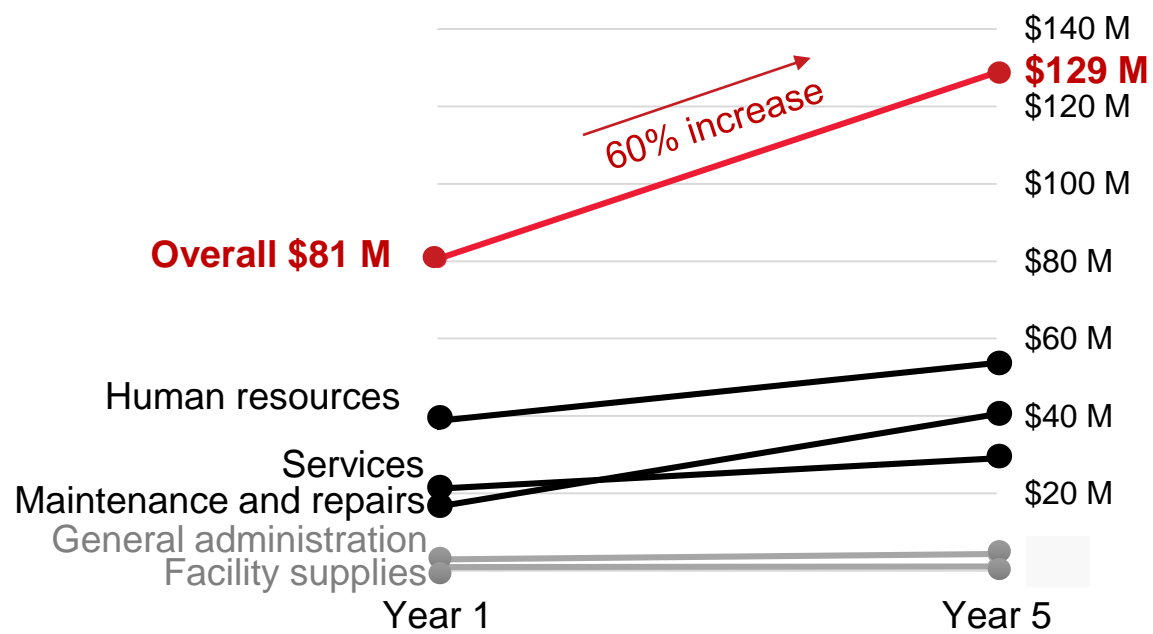


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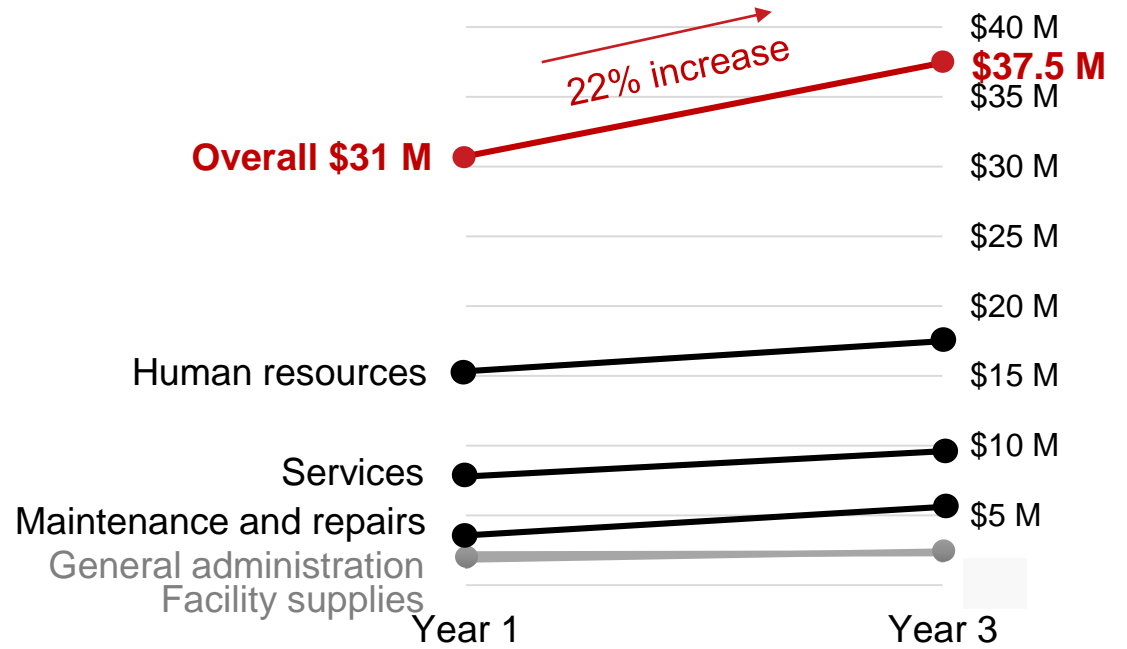
# Optimize operations for full exploitation

Targeted investments in human resources  
and maintenance & repairs

5-year cohort








3-year cohort



# 1

## Optimize operations for full exploitation

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-  Long-term sustainability
-  Service delivery
-  User base & access
-  Allocation of MSI resources
-  Staff & training

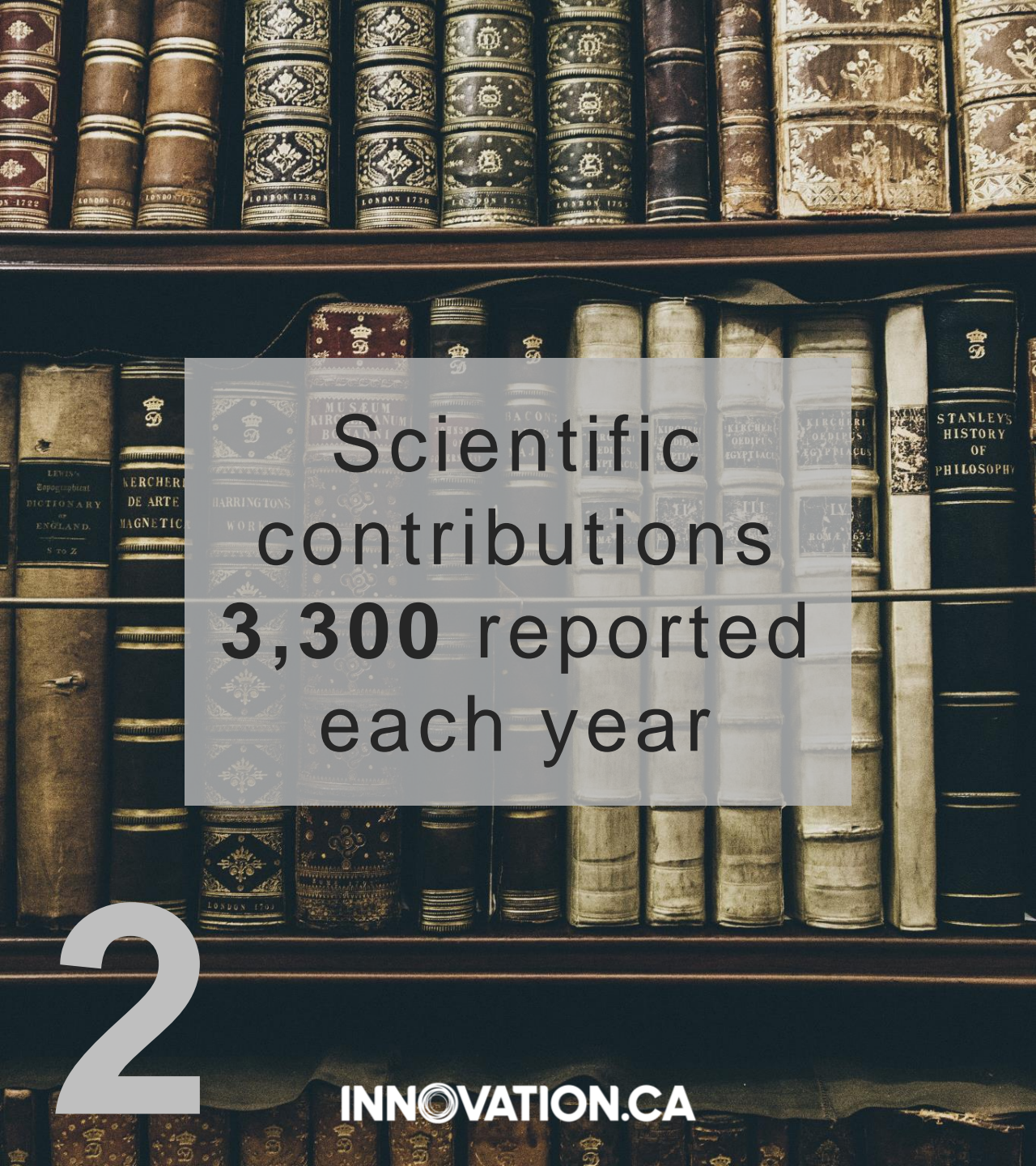


### Users

40% growth in  
three years

35,000 per year





# Secure and strengthen to deliver world-class research and benefits

Scientific  
contributions  
**3,300** reported  
each year

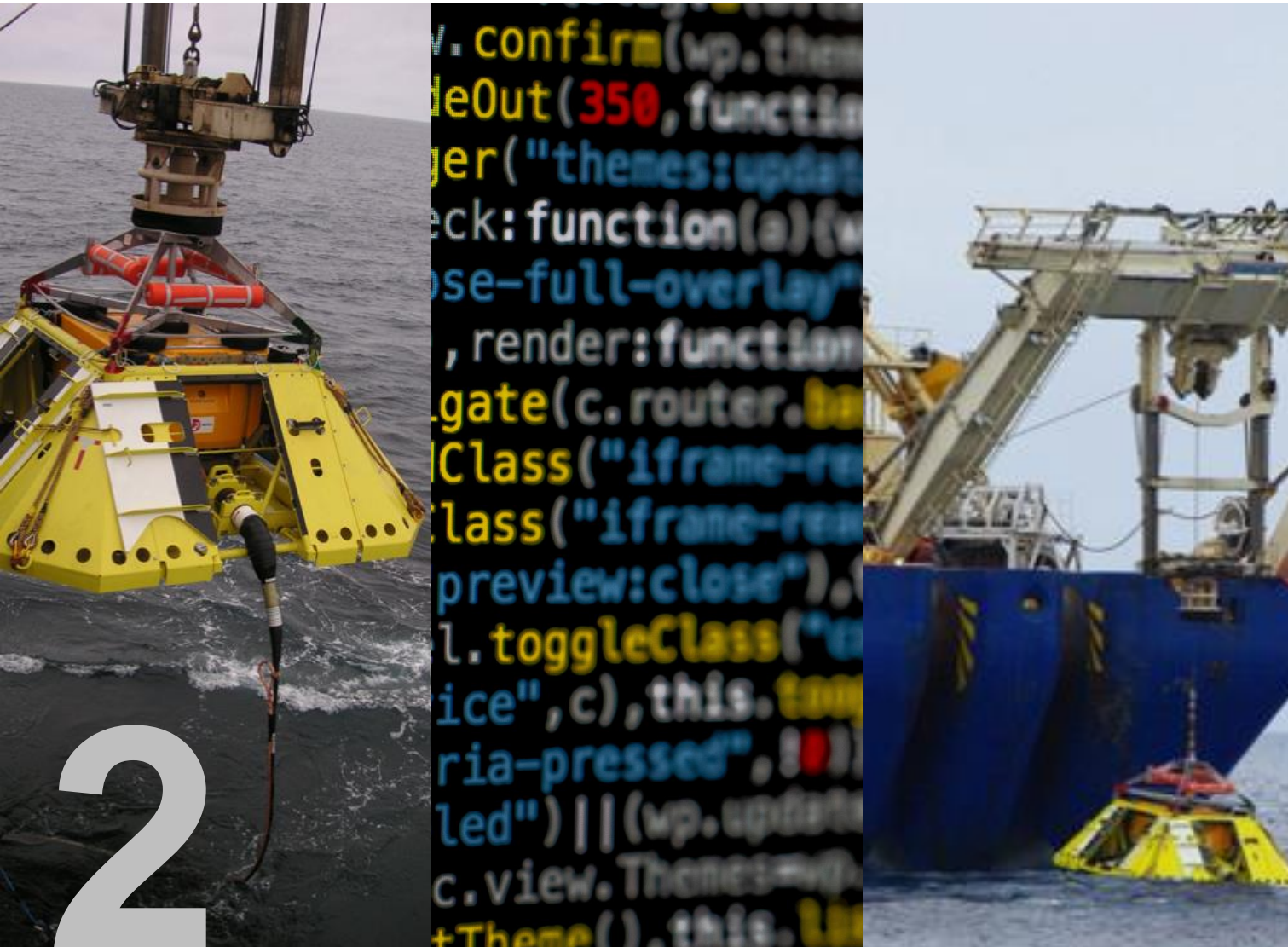
- Enabled research excellence and knowledge advancement
- Enhanced international stature of facilities & collaborations
- Stimulated industry partnership opportunities & generated technology transfer activities
- Training the next generation: 11,000 yearly

2



# Ocean Networks Canada

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- A recognized “World Data System”
- Impact and collaboration rates ahead of other ocean observatories
- Commercialization revenues and direct impact ~\$102 million (2012-2016)
- 1<sup>st</sup> earthquake warning system in Canada
- 1<sup>st</sup> ocean acidification sensors in the Arctic



# 3

## Promotion of best practices in governance and management

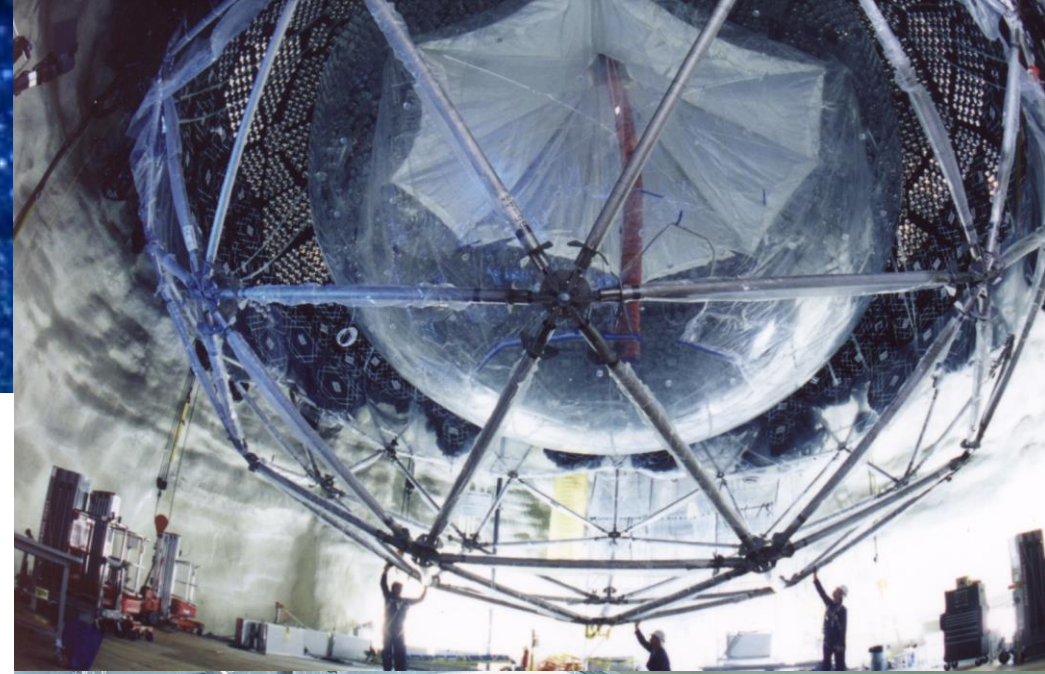
- Improved governance and management structures and practices
- Forward-looking and actionable strategic plans
- Risk management frameworks
- Performance measurement strategies
- A culture of continuous improvement



# 3

## SNOLAB – expansion to a multi-experiment facility

- Precursor to the MSI Fund
- Evolution of organizational structure
- Focus on risk management
- Project lifecycle approach
- Policy-driven governance recognized as best in its class



**Conditions imposed through the  
merit-review process have  
driven positive changes**



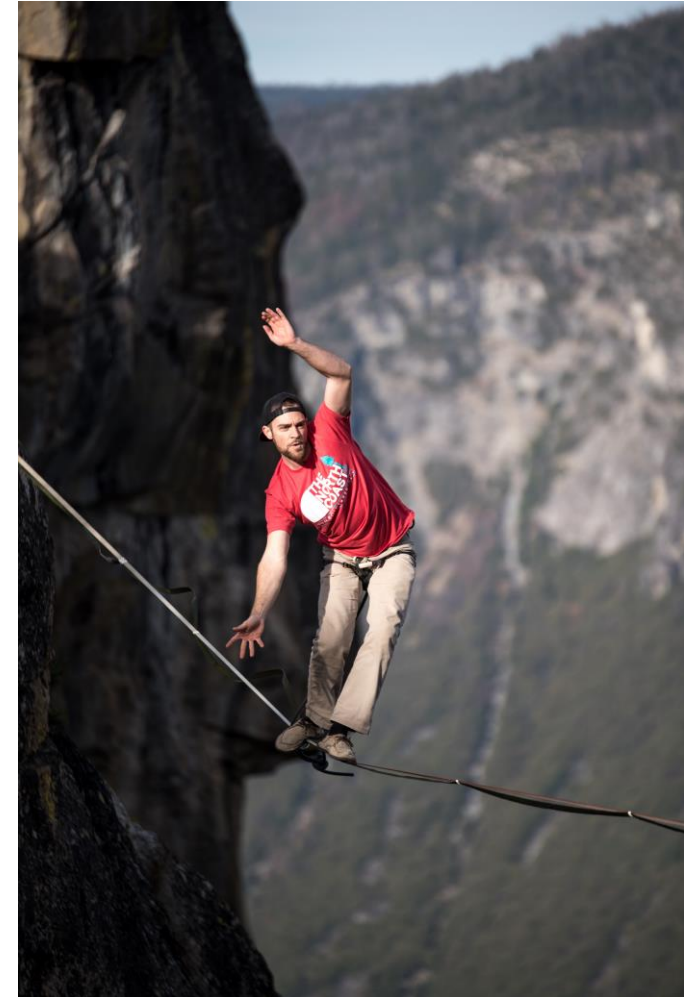
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# Common Challenges

- Attraction, retention of talent
  - Maintaining infrastructure at leading edge
  - Funding model
  - Cost of research
  - Performance management
  - Demonstrating impact and achievements
  - User identification and engagement
  - The list goes on...
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# Takeaways from the report

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- MSI funding enabled facilities to conduct outstanding and world-class science. The objectives of the MSI fund have been met.
- Challenges identified will inform the reporting framework and future activities.
- Tailored-to-facility approach in best interest of all stakeholders.
- Promote a culture of continuous improvement and help facilities think more strategically for the long-term.





A person is standing on a tall, dark ladder that extends from the bottom left towards the center of the frame. The person is seen from behind, wearing a light-colored t-shirt and shorts, with their right arm raised towards the sky. The background is a vast blue sky filled with soft, white clouds. The overall mood is one of aspiration and reaching for new heights.

**Let's reinvent  
the future!**

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